

DETAILED ACTION

1. Claims 1-10 are pending.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 03101778.3, filed on May 18, 2003.

Information Disclosure Statement

3. IDS filed on December 13, 2005 has been acknowledged by the examiner.

Drawings

4. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because FIG. 1, does not contain any text. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

5. The specification is objected to because of the following informalities:

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Appropriate corrections are required.

Claim Objections

6. Claims 1-10 are objected to because of the following informalities:

All references to drawing elements (12), (14), (16), (18a), (18b), (20), (22), (23), (30), (34) and (40) should be removed from the claims. Appropriate corrections are required.

Art Unit: 4141

7. **Claims 1, 4 and 9 are objected to because of the following informalities:**

There should be a colon (:) inserted after the word 'comprising' on the first line of Claims 1 and 4 and on the second line of Claim 9. Appropriate corrections are required.

8. **Claim 4 is objected to because of the following informalities:**

The dash (-) in Claim 4, Line 3 should begin on a new line. Also, the dash (-) in Claim 4, Line 5 should begin on a new line. Appropriate corrections are required.

9. **Claim 6 is objected to because of the following informalities:**

Claim 6 recites 'und' which appears to be a misspelling of the word 'and'. Appropriate correction is required.

10. **Claim 10 is objected to because of the following informalities:**

The dash (-) in Claim 10, line 4 should begin on a new line. Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ishida (US 6,212,410).

As per Claim 1, Ishida discloses:

- *A mobile device comprising* (FIG.1, Element 11, A block diagram depicting a portable telephone is provided.)

- a chargeable supply element for supplying the mobile device with electrical power, (Column 3, Lines 17-18, “The secondary battery (32) is a rechargeable battery and supplies power to the portable telephone main unit.”)

- means for determining a charge level of the supply element, (Column 7, Lines 59-67 and Column 8, Lines 1-6, “When the battery unit (31) is mounted to the main unit (11), since the detection terminal A (25) of the battery terminal block (13) of the portable telephone main unit (11) is connected to the battery ground terminal 2 (45), the logic value varies from "1" to "0" (where "1" represents the voltage level; and "0" represents the GND level). Thus, when the battery unit detecting circuit A (14) (which always receives power from the backup battery (18)) detects that the battery unit (31) is mounted to the main unit (11), the battery unit detecting circuit A (14) outputs a control signal that controls the switch A (19) through the OR circuit A (20) (which also always receives power from the backup battery (18)) so as to supply power from the backup battery (18) to the security checking circuit A (27). Thus, the security checking circuit A (27) operates.” The means for determining the charge level of the supply element as disclosed in the application is provided by circuits located in the authentication unit within the portable device. The battery unit detecting circuit A described by Ishida determines whether or not the battery unit has been mounted. In this manner, the charge level of the supply element is determined as either present or absent.)

- at least one function unit; (FIG.1, Element 11, The function of the mobile electronic device that Ishida describes is that of a telephone.)

- and a first authentication unit for evaluating the charge level, wherein the authentication unit monitors an authentication signal in the event of an increase and/or a sudden change in the charge level and if the authentication signal is absent or incorrect, it at least limits the operation of the function unit. (Column 3, Lines 34-41, “The power of the portable telephone unit with the security function according to the present invention is turned on only when identification information such as a designated

number of the main unit matches that of the battery unit (or a predetermined condition of the main unit matches that of the battery unit). Thus, even if another battery unit of the same type is mounted to the telephone unit, the power of portable telephone unit is not turned on.” Ishida accomplishes the function of the first authentication unit by comparing the stored identification information of the battery unit to the stored identification information of the portable telephone apparatus. This verification occurs each time a battery unit is mounted onto the portable telephone device, causing a sudden change to the charge level being received by the portable telephone unit. If the two stored numbers do not match, authentication has failed and use of the portable telephone unit is not allowed.).

As per Claim 2, Claim 1 is incorporated and further Ishida discloses:

- the authentication unit has at least a first authentication memory element for storing an authentication criterion (Column 2, Lines 56-59, “The match of the identification information occurs upon the match of designated numbers stored in respective memories of the portable telephone main unit and/or the battery charger, and the battery unit.”)

- wherein the authentication unit checks the authentication signal by means of the authentication criterion and, in the event of agreement, enables the operation of the function unit. (Column 5, Lines 8-26, “[A] portable telephone main unit (hereinafter referred to as the main unit) (11) comprises a power supply (12), a battery unit detecting circuit A (14), a storing memory A (16), a comparing circuit A (15), a start signal sending circuit A (17), an OR circuit A (20), a battery terminal block (13), a backup battery (18), and a switch A (19). The power supply (12) supplies power to each portion (such as ICs) of the main unit (11). The battery unit detecting circuit A (14) detects whether or not a battery unit (31) has been mounted to the main unit (11). The battery unit (31) supplies power to the main unit (11). The backup battery (18) always supplies power to the battery unit detecting circuit A (14). The storing memory A (16) stores a designated number [1]. The comparing circuit A (15) compares a designated number [2] of the battery unit (31)

and the designated number [1] stored in the storing memory A (16). The start signal sending circuit A (17) sends to a switch B (37) a signal that causes power to be supplied to the main unit (11).”).

As per Claim 3, Claim 1 is incorporated and further Ishida discloses:

- a value of the charge level of the supply element can be stored in a charge-level memory element, (Column 2, Lines 56-59 and FIG. 1, Element 16, “The match of the identification information occurs upon the match of designated numbers stored in respective memories of the portable telephone main unit and/or the battery charger, and the battery unit.” The means for determining the charge level of the supply element as disclosed in the application is provided by circuits located in the authentication unit within the portable device. The battery unit detecting circuit A described by Ishida determines whether or not the battery unit has been mounted. In this manner the charge level of the supply element is determined as either present or absent. The portable telephone main unit stores information in storing memory A.)

- wherein the charge-level memory element is preferably a non-volatile memory.

(Column 7, Lines 36-41, “The main unit (11), the battery unit (31), and the battery charger (51) have respective storing memories (for example, SRAMs or EEPROMs) that store the designated numbers [1], [2], and [3], respectively. The designated numbers [1], [2], and [3] vary corresponding to a set of the main unit, battery unit, and battery charger.”

As per Claim 4, Claim 1 is incorporated and further Ishida discloses:

- An anti-theft system comprising (Column 1, Lines 5-8, “The present invention relates to a portable telephone apparatus of mobile communication type, in particular, to a portable telephone apparatus with a security function for preventing power from being supplied in the event that the apparatus has been stolen.”)

- **a base station**, (FIG.2, Element 51, A block diagram depicting the battery charger is provided.)

- **wherein the base station has a second authentication unit**, (Column 6, Lines 3-16, “[T]he battery charger (51) comprises a charging circuit (52), a battery unit detecting circuit C (54), a storing memory C (56), a comparing circuit C (55), a start signal sending circuit C (57), and a charging terminal block (53). The charging circuit (52) is connected to an AC power line and supplies a DC voltage. The battery unit detecting circuit C (54) detects whether or not the battery unit (31) has been mounted to the battery charger (51). The storing memory C (56) stores a designated number [3]. The comparing circuit C (55) compares the designated number [2] of the battery unit (31) and the designated number [3] stored in the storing memory C (56). The start signal sending circuit C (57) sends to the switch B 37 a signal that causes the battery charger (51) to start charging the battery unit (31).” Ishida accomplishes the function of the second authentication unit by comparing the stored identification information of the battery unit to the stored identification information of the battery charger. If the two stored numbers match, authentication has succeeded and the battery charger begins charging the battery unit.)

- **and the authentication units can be connected via a data path in such a way that the authentication signals can be conveyed at least from the second authentication unit to the first authentication unit**. (FIG. 1, Elements 13 and 33 and FIG. 2, Elements 39 and 53, The figures provided show a battery terminal block for receiving power from the battery unit and for exchanging data with the battery unit as an interface, a power supply terminal block for supplying power to the portable telephone main unit and for exchanging data with the portable telephone main unit as an interface and a charging terminal block for charging the battery unit when the battery unit is mounted to the battery charger and for exchanging data with the battery unit as an interface. These are the data paths which allow the security checking circuits as disclosed by Ishida to communicate.).

As per Claim 5, Claim 4 is incorporated and further Ishida discloses:

- an electrical supply path is present from the base station to the mobile part for charging the supply element. (Column 6, Lines 65-67 and Column 7, Lines 1-4, “Referring to FIG. 4, the charging terminal block (53) comprises a charging power supply terminal (61), a charging ground terminal 1 (62), a charging ground terminal 2 (66), a detection terminal C (65), a send terminal C (63), and a data terminal C (64). The charging power supply terminal (61) and the charging ground terminal 1 (62) charge the battery unit (31). In addition, referring to FIG. 3, the power supply terminal block (33) comprises a battery power supply terminal (41), a battery ground terminal 1 (42), a battery ground terminal 2 (45), a detection terminal B (46), a receive terminal (43), and a data terminal B (44). The battery power supply terminal (41) supplies power to the main unit (11).” It is inherent that an electrical supply path is present in order for the battery charger to supply power to the battery unit which supplies power to the portable telephone apparatus.).

As per Claim 6, Claim 5 is incorporated and further Ishida discloses:

- the data path and the supply path have at least partly common electrical conductors, (Column 5, Lines 29-33, Column 5, Lines 60-61 and Column 6, Lines 17-20, “The battery terminal block (13) receives power from the battery unit (31) when the battery unit (31) is mounted to the main unit (11). In addition, the battery terminal block (13) functions as an interface (hereinafter referred to as the I/F) that exchanges data. The power supply terminal block (33) supplies power and functions as an I/F for exchanging data. The charging terminal block (53) serves to charge the battery unit (31) when the battery unit (31) is mounted to the battery charger (51). In addition, the charging terminal block (53) functions as an I/F for exchanging data.)

- wherein the supply path preferably has at least one supply voltage and data are transmitted on the data path by modulating the supply voltage. (Column 6, Lines 7-20, “The charging circuit (52) is connected to an AC power line and supplies a DC voltage. The battery unit detecting circuit C (54) detects whether or not the battery unit (31) has

been mounted to the battery charger (51). The storing memory C (56) stores a designated number [3]. The comparing circuit C (55) compares the designated number [2] of the battery unit (31) and the designated number [3] stored in the storing memory C (56). The start signal sending circuit C (57) sends to the switch B 37 a signal that causes the battery charger (51) to start charging the battery unit (31). The charging terminal block (53) serves to charge the battery unit (31) when the battery unit (31) is mounted to the battery charger (51). In addition, the charging terminal block (53) functions as an I/F for exchanging data.” The battery charger contains a supply voltage and transmits this voltage to the battery unit when it is mounted to the charger via the charging terminal block. The charging terminal block transmits data as well. Although not explicitly stated in the reference, varying the modulation of a direct current in order to transmit data is known to those with ordinary skill in the art.).

As per Claim 7, Claim 4 is incorporated and further Ishida discloses:

- the data path is implemented in the form of acoustic and/or electromagnetic wireless transmitting and receiving units. (Column 6, Lines 25-32, “In FIG. 1, a radio unit composed of a radio frequency amplifier, a mixer, a synthesizer, a modem, and so forth, a controlling circuit for processing an audio signal and a control signal for a speaker and a microphone, and a power supply for the battery charger (51) that is connected to an AC power line and supplies a DC voltage are all omitted therefrom in order to simplify the drawing to facilitate the description of the invention.”).

As per Claim 8, Claim 4 is incorporated and further Ishida discloses:

- there is a bi-directional data path between the base station and the mobile part. (FIG. 1, Elements 13 and 33 and FIG. 2, Elements 39 and 53, The figures provided show a battery terminal block for exchanging data with the battery unit as an interface, a power supply terminal block for exchanging data with the portable telephone main unit as an interface and a charging terminal block for exchanging data with the battery unit as an interface. These data paths are bidirectional.).

As per Claim 9, Claim 4 is incorporated and further Ishida discloses:

- *a plurality of mobile devices* (Although not explicitly stated by the reference, the anti-theft system disclosed by Ishida anticipates its use with other electronic portable devices.)

- *and a base station*, (FIG.2, Element 51, A block diagram showing the battery charger is provided.)

- *wherein authentication criteria for each of the mobile devices are stored in a memory element of the base station*. (Column 2, Lines 56-59, "The match of the identification information occurs upon the match of designated numbers stored in respective memories of the portable telephone main unit and/or the battery charger, and the battery unit.").

As per Claim 10, Ishida discloses:

- *A method for protecting a mobile device against theft, in which* (Column 2, Lines 60-66 and Column 3, Lines 1-4, "In the portable telephone apparatus with the security function according to the present invention, only when the designated numbers of the portable telephone main unit and the battery unit that supplies power thereto match, power of the portable telephone main unit is turned on. When another battery unit of the same type is mounted to the portable telephone main unit, power to the main unit is not turned on. In addition, another function is provided used when the battery unit is charged. Unless the designated numbers of the battery unit and the battery charger match, the battery charger is prohibited from charging the battery unit.")

- *the charge level of a chargeable supply element is determined* (Column 7, Lines 59-67 and Column 8, Lines 1-6, "When the battery unit (31) is mounted to the main unit (11), since the detection terminal A (25) of the battery terminal block (13) of the portable telephone main unit (11) is connected to the battery ground terminal 2 (45), the logic value varies from "1" to "0" (where "1" represents the voltage level; and "0" represents the GND level). Thus, when the battery unit detecting circuit A (14) (which always

receives power from the backup battery (18)) detects that the battery unit (31) is mounted to the main unit (11), the battery unit detecting circuit A (14) outputs a control signal that controls the switch A (19) through the OR circuit A (20) (which also always receives power from the backup battery (18)) so as to supply power from the backup battery (18) to the security checking circuit A (27). Thus, the security checking circuit A (27) operates.” The means for determining the charge level of the supply element as disclosed in the application is provided by circuits located in the authentication unit within the portable device. The battery unit detecting circuit A described by Ishida determines whether or not the battery unit has been mounted. In this manner the charge level of the supply element is determined as either present or absent.)

- and, in the event of an increase and/or a sudden change in the charge level, the operation of a function unit is at least restricted until an authentication signal is entered. (Column 3, Lines 34-41, “The power of the portable telephone unit with the security function according to the present invention is turned on only when identification information such as a designated number of the main unit matches that of the battery unit (or a predetermined condition of the main unit matches that of the battery unit). Thus, even if another battery unit of the same type is mounted to the telephone unit, the power of portable telephone unit is not turned on.” The prior art teaches the comparison of the information of the battery unit to the stored identification information of the portable telephone apparatus. This verification occurs each time a battery unit is mounted onto the portable telephone device, causing a sudden change to the charge level being received by the portable telephone unit. If the two stored numbers do not match, authentication has failed and use of the portable telephone unit is not allowed.).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Apparatus and Method for Detecting Theft of Electronic Equipment, US 5,231,375 A.

TITLE: Method and Apparatus for Code Matching the Base and Mobile Unit of a Cordless Telephone Set, US 4,794,636 A.

TITLE: Security Arrangement for Cordless Telephone System, US 4,736,404 A.

TITLE: Address Encoding System for Portable Battery-Operated Devices, US 4,731,813 A.

TITLE: An Electronic Anti-Theft Apparatus and Related Method, WO 9,723,986 A1.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tangela T. Chambers whose telephone number is 571-270-3168.

The examiner can normally be reached on Monday to Thursday, 7:30am-5pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chameli Das can be reached on 571-270-1392. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4141

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tangela T. Chambers
Patent Examiner
Art Unit 4141
November 21, 2007

TTC
/Chameli C Das/
Supervisory Patent Examiner, Art Unit 4141